

# United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/928,056	08/10/2001	George T. Hutchings	039362-0070	6943	
24375 7590 12/18/2006 VOLPE AND KOENIG, P.C. DEPT. MOT			EXAM	EXAMINER	
			USTARIS, JOSEPH G .		
UNITED PLAZ 30 SOUTH 177	ZA, SUITE 1600 TH STREET	•	ART UNIT	PAPER NUMBER	
PHILADELPHIA, PA 19103			2623		
SHORTENED STATUTOR	RY PERIOD OF RESPONSE	MAIL DATE	DELIVER	DELIVERY MODE	
3 MONTHS		12/18/2006	PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)				
Office Action Occurrence	09/928,056	HUTCHINGS, GEORGE T.				
Office Action Summary	Examiner	Art Unit				
	Joseph G. Ustaris	2623				
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPL' WHICHEVER IS LONGER, FROM THE MAILING D Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be timwill apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONEI	ely filed the mailing date of this communication. (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 18 C	ctober 2006					
·= · ·	action is non-final.					
· <u> </u>	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
•	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4)⊠ Claim(s) 1-29 is/are pending in the application						
	4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-29</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/o	r election requirement.					
Application Papers						
9)☐ The specification is objected to by the Examiner.						
10) The drawing(s) filed on is/are: a) acc	epted or b) objected to by the E	Examiner.				
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correct	tion is required if the drawing(s) is obj	ected to. See 37 CFR 1.121(d).				
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
		-				
Attachment(s)						
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date  5) Notice of Informal Patent Application						
3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date  5) Notice of Informal Patent Application  6) Other:						

Application/Control Number: 09/928,056 Page 2

Art Unit: 2623

#### **DETAILED ACTION**

#### Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 18, 2006 has been entered.

Claims 1-29 are pending. Claim 1 is amended.

# Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-4, 9, and 11-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Margulis (US006263503B1).

Regarding claim 1, Margulis discloses a wireless video display system (See Figures 1 and 5) for displaying a video image in response to video information

generated by a content source (See Fig. 1, 112), the wireless video display system comprising:

a display processing module for generating processed video information in response to the video information (See Fig. 1, 5, and 6; column 7 lines 29-43);

a wireless display module including a display included in the wireless video display module (See Fig. 2 and 7); and

a wireless video link (Figure 1) for transmitting the processed video information from the display processing module (Fig. 5) to the wireless video display module (Figs. 2 and 7), wherein the wireless video display module (Figs. 2 and 7) displays the video image over the display in response to the processed video information (Column 11, lines 29-56).

Regarding claim 2, the wireless video display system further comprises a battery for providing power to the display (See Fig. 7, 752).

Regarding claim 3, the video information is compressed video information (See Fig. 5, video compression 520), further comprising a decompression device (See Fig. 7, A/V Decoder 732; column 13 lines 18-25) for generating decompressed video information, wherein the wireless video display (See Fig. 2 and 7) displays the video image in response to the decompressed video information (See Fig. 9).

Regarding claim 4, the video information is compressed using MPEG compression techniques (See column 7 lines 54-64).

Regarding claim 9, the system further comprises display controls (See Fig. 2; column 5 lines 35-49).

Art Unit: 2623

Regarding claim 11, the system further comprising selection functions (See Fig. 2; column 5 lines 35-49).

Regarding claim 12, the display processing module (See Figs. 1, 5, and 6) negotiates the wireless video link as a high speed video link. The wireless link in Margulis is a high speed link because it is capable of transmitting broadband data.

Regarding claim 13, the wireless video display module (See Figs. 2 and 7) transmit channel tuning commands to the display processing module (See Fig. 1, 5 and 6) (column 5 lines 35-49) (e.g. changing the channel of the tuner on Fig. 6, 626).

## Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 5 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Margulis (US006263503B1) in view of Atkinson (US20010054180A1).

As to claim 5, Margulis teaches the limitations corresponding to claim 1 as discussed above. Margulis fails to teach a wireless video display system wherein the wireless video link complies with the IEEE 802.11(b) standard.

However, Atkinson teaches a wireless video display module (PDA 289) in a wireless video display system (Figure 2) wherein the wireless video link complies with the IEEE 802.11(b) standard (See paragraph 42). At the time the invention was made, it

would have been obvious for a person of ordinary skill in the art, to modify the spread spectrum transmission method (column 7 lines 12-20 of Margulis), using the 802.11(b) standard, for the purpose of reducing cost by implementing a transmission technology that is readily available to the consumer.

As to claim 14, Margulis teaches the limitations corresponding to claim 1 as discussed above. Margulis also teaches the wireless video display system (Figure 1), wherein the video information is generated by the content source (See Fig. 1, 112), and the display processing module (See Figs. 1, 5, and 6) formats video information as processed video information to allow the processed video information to be transmitted over the wireless video link (See column 7 lines 35-64). Margulis fails to teach a wireless video display system wherein the wireless video link comprises a narrow bandwidth wireless video link.

However, Atkinson teaches a wireless video display module (PDA 289) in a wireless video display system (Figure 2) wherein the wireless video link complies with the IEEE 802.11(b) standard or "narrow bandwidth wireless video link" (See paragraph 42). At the time the invention was made, it would have been obvious for a person of ordinary skill in the art, to modify the spread spectrum transmission method (column 7 lines 12-20 of Margulis), using the 802.11(b) standard, for the purpose of reducing cost by implementing a transmission technology that is readily available to the consumer.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Margulis (US006263503B1) in view of Matsui et al. (US006167514A).

Art Unit: 2623

As to claim 6, Margulis teaches the limitations corresponding to claim 1 as discussed above. Margulis fails to teach a wireless video display system wherein the wireless video link provides a secure connection, in which data being transferred is encrypted, over which the video information is received by the wireless video link.

However, Matsui et al. teaches a wireless communication system wherein the data being transmitted (S66 in Figure 11 of Matsui et al.) is encrypted (S72 in Figure 11 of Matsui et al.). This reads on to the wireless video link provides a secure connection, in which data being transferred is encrypted, over which the video information is received by the wireless video link.

At the time the invention was made, it would have been obvious for a person of ordinary skill in the art, to modify the wireless video display system (Figure 1 of Margulis), using the encryption method of Matsui et al., for the purpose of securing data by avoiding the problem of having unprotected data intercepted by a third party (Column 1, lines 14-16 of Matsui et al.).

Claims 7, 8, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Margulis (US006263503B1) in view of Hylton et al. (5,708,961).

Claim 7 contains the limitations of claim 1 and is analyzed as previously discussed with respect to that claim. However, Margulis does not disclose a decryption device for decrypting the video signal.

Hylton discloses a wireless video distribution system. Hylton discloses a decryption device (Unit 207 in Figure 5) for decrypting the video signal (Column 19,

lines 13-16). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the system disclosed by Margulis to include a decryption device for decrypting the video signal, as taught by Hylton, in order to expand the capabilities of the system thereby allowing the user to receive protected data.

Regarding claim 8, Hylton also discloses the wireless video display system further comprises audio controls (Column 17, lines 27-31).

Regarding claim 10, Hylton also discloses the wireless video display system further comprises cursor functions (Column 16, lines 65 - 67, Column 17, line 1).

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Margulis (US006263503B1) in view of Atkinson (US20010054180A1) as applied to claims 5 and 14 above, and further in view of Hylton et al. (5,708,961).

Regarding claim 15, Margulis in view of Atkinson does not disclose a PID filter that filters out information not selected by the user from the processed video information that is transmitted over the wireless video link.

Hylton discloses a wireless video distribution system. Hylton discloses PID filter (Unit 15 in Figure 1) that filters out information not selected by the user from the processed video information that is transmitted over the wireless video link (Column 6, lines 10-15). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the system disclosed by Margulis in view of Atkinson to include a PID filter that filters out information not selected by the user from

Art Unit: 2623

the processed video information that is transmitted over the wireless video link, as taught by Hylton, in order to expand the capabilities of the system thereby efficiently using the available bandwidth within the wireless link.

Claims 16-18 and 25-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hylton et al. (5,708,961) in view of Atkinson (US20010054180A1).

As to claim 16, Hylton et al. teaches a method comprising formatting video information in a form that can be transmitted over a wireless video link (Column 6, lines 18-34). Hylton et al. fails to teach a wireless video display system wherein the wireless video link comprises a narrow bandwidth wireless video link.

However, Atkinson teaches a wireless video display module (PDA 289) in a wireless video display system (Figure 2) wherein the wireless video link complies with the IEEE 802.11(b) standard or "narrow bandwidth wireless video link" (See paragraph 42). At the time the invention was made, it would have been obvious for a person of ordinary skill in the art, to modify the spread spectrum transmission method (Column 6, lines 35-57 of Hylton et al.), using the 802.11(b) standard, for the purpose of reducing cost by implementing a transmission technology that is readily available to the consumer.

As to claim 17, Hylton et al. teaches the limitations corresponding to claim 16 as discussed above. Hylton et al. also teaches the wireless video display system (Figure 1), wherein the video information is generated by a content source (Column 5, lines 42 - 44), and a display processing module (Unit 10 in Figure 1) formats the video information

Art Unit: 2623

as processed video information to allow the processed the video information to be transmitted over the narrow bandwidth wireless video link as discussed above in claim 16 (See Hylton Column 6, lines 18-34).

As to claim 18, Hylton et al. teaches the limitations corresponding to claims 16 and 17 as discussed above. Hylton et al. also teaches a method further comprising a packet identifier (PID) filter (Unit 15 in Figure 1) that filters out information not selected by the user from the processed video information that is transmitted over the wireless video link (Column 6, lines 10-15).

As to claim 25, Hylton et al. teaches a wireless video display system (Figure 1), further comprising a display processing module (Unit 10 in Figure 1) to format video information containing a large number of channels of video information to be transmitted as processed video information over a wireless video link (Column 5, lines 58-67, Column 6, lines 1-4, 18-24).

Hylton et al. also teaches a tuner that filters the number of channels in the processed video information relative to the number of channels in the video information (Column 29, lines 19-21).

Hylton et al. also teaches a PID filter (Unit 15 in Figure 1) that selects the video information to be filtered to produce the processed video information (Column 6. lines 10-15).

Hylton et al. fails to teach a wireless video display system wherein the wireless video link comprises a narrow bandwidth wireless video link.

consumer.

However, Atkinson teaches a wireless video display module (PDA 289) in a wireless video display system (Figure 2) wherein the wireless video link complies with the IEEE 802.11(b) standard or "narrow bandwidth wireless video link" (See paragraph 42). At the time the invention was made, it would have been obvious for a person of ordinary skill in the art, to modify the spread spectrum transmission method (Column 6, lines 35-57 of Hylton et al.), using the 802.11(b) standard, for the purpose of reducing cost by implementing a transmission technology that is readily available to the

Page 10

As to claim 26, Hylton et al. teaches the limitations corresponding to claim 25 as discussed above. Hylton et al. also teaches a wireless video display system (Figure 1) further comprising a user-input device that controls the processing of the video information into processed video information (Column 8, lines 34-45, 60-67, Column 9, lines 1-8).

As to claim 27, Hylton et al. teaches the limitations corresponding to claim 25 as discussed above. Hylton et al. also teaches a wireless video display system (Figure 1) further comprising a wireless video display module (Unit 100 in conjunction with Unit 103 in Figure 1), wherein the display processing module (Unit 10 in Figure 1), transmits processed video information to the wireless video display module (Unit 100 in conjunction with Unit 103 in Figure 1) over the wireless video link (Column 6, lines 18-24, Column 7, lines 66-67, Column 8, lines 1-10).

As to claim 28, Hylton et al. teaches the limitations corresponding to claim 25 as discussed above. Hylton et al. also teaches a wireless video display system (Figure 1)

wherein the wireless video display module (Unit 100 in conjunction with Unit 103 in Figure 1) further comprises a data decompression device (Unit 129 in Figure 4, Column 14, lines 66-67).

As to claim 29, Hylton et al. teaches the limitations corresponding to claim 25 as discussed above. Hylton et al. also teaches a wireless video display system (Figure 1) wherein the wireless video display module (Unit 100 in conjunction with Unit 103 in Figure 1) further comprises a decryption function (Unit 207 in Figure 5, Column 19, lines 13 - 16).

Claims 19-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hylton et al. (5,708,961) in view of Atkinson (US20010054180A1), Matsui et al. (US006167514A), and Ahmed et al. (US006519773B1).

As to claim 19, Hylton et al. teaches a wireless video display system (Figure 1), further comprising a display processing module (Unit 10 in Figure 1) to format video information to be transmitted as processed video information over a wireless video link (Column 5, lines 58-67, Column 6, lines 1-4, 18-24, Column 8, lines 6-10).

Hylton et al. also teaches the display processing module (Unit 10 in Figure 1) further comprising a content processor (Unit 10 in Figure 1) that processes the video information into processed video information (Column 6, lines 18-34).

Hylton et al. further teaches the content processor (Unit 10 in Figure 1 of Hylton et al.) encodes the video information (Column 11, lines 10-14 of Hylton et al.).

Hylton et al. fails to teach a wireless video display system wherein the wireless video link comprises a narrow bandwidth wireless video link and the content processor encrypts and forward error corrects the video information.

However, Atkinson teaches a wireless video display module (PDA 289) in a wireless video display system (Figure 2) wherein the wireless video link complies with the IEEE 802.11(b) standard or "narrow bandwidth wireless video link" (See paragraph 42). At the time the invention was made, it would have been obvious for a person of ordinary skill in the art, to modify the spread spectrum transmission method (Column 6, lines 35-57 of Hylton et al.), using the 802.11(b) standard, for the purpose of reducing cost by implementing a transmission technology that is readily available to the consumer.

However, Matsui et al. teaches a content processor (Unit 1 in Figure 2) that encrypts data. This reads on to the claimed content processor that encrypts the video information.

At the time the invention was made, it would have been obvious for a person of ordinary skill in the art, to modify the content processor (Unit 10 in Figure 1 of Hylton et al.), using the encryption method of Matsui et al., for the purpose of securing data by avoiding the problem of having unprotected data intercepted by a third party (Column 1, lines 14-16 of Matsui et al.).

Ahmed et al. further teaches a forward error correction method in the head-end (Column 3, lines 56-58). This reads on the claimed content processor (head-end) forward error corrects the video information.

At the time the invention was made, it would have been obvious for a person of ordinary skill in the art, to modify the content processor (Head-end), using the encryption method of Ahmed et al. and the forward error correction method of Ahmed et al., for the purpose of saving costly implementations in individual video display units (Column 3, lines 56 - 58).

As to claim 20, Hylton et al. teaches the limitations corresponding to claim 19 as discussed above. Hylton et al. further teaches a wireless video display system (Figure 1 of Hylton et al.) further comprising a user-input device that controls the processing of the video information into processed video information (Column 8, lines 34-45, 60-67, Column 9, lines 1-8).

As to claim 21, Hylton et al. teaches the limitations corresponding to claim 19 as discussed above. Hylton et al. further teaches a wireless video display system (Figure 1 of Hylton et al.) further comprising a wireless video display module (Unit 100 in conjunction with Unit 103 in Figure 1), wherein the display processing module (Unit 10 in Figure 1) transmits processed video information to the wireless video display module (Unit 100 in conjunction with Unit 103 in Figure 1) over the wireless video link (Column 6, lines 18-34).

As to claim 22, Hylton et al. teaches the limitations corresponding to claims 19 and 21 as discussed above. Hylton et al. fails to teach a wireless video display module further comprises a first content key generator and negotiation function and the wireless video display module comprises a second content key generator and negotiation function, and wherein the first content key generator and negotiation function and the

second content key generator and negotiation function are used to provide a secure connection over the wireless link.

However, Matsui et al. teaches a wireless communications system that comprises a first content key generator (Unit 102 in Figure 6) and negotiation function (Column 9, lines 1-4). Matsui et al. also teaches a wireless communications system that comprises a second content key generator (Unit 102' in Figure 7) and negotiation function (Column 9, lines 9-20). This reads on to the claimed wireless video display module further comprises a first content key generator and negotiation function and the wireless video display module comprises a second content key generator and negotiation function, and wherein the first content key generator and negotiation function and the second content key generator and negotiation function are used to provide a secure connection over the wireless link.

At the time the invention was made, it would have been obvious for a person of ordinary skill in the art, to modify the wireless video display system of Hylton et al., using the encryption and decryption mechanism and methods of Matsui et al., for the purpose of securing data by avoiding the problem of having unprotected data intercepted by a third party (Column 1, lines 14-16 of Matsui et al.).

As to claim 23, Hylton et al. teaches the limitations corresponding to claims 19 and 21 as discussed above. Hylton et al. also teaches a wireless video system (Figure 1 of Hylton et al.) wherein the wireless video display module (Unit 100 in conjunction with Unit 103 in Figure 1) further comprises a data decompression device (Unit 129 in Figure 4).

As to claim 24, Hylton et al. teaches the limitations corresponding to claims 19 and 21 as discussed above. Hylton et al. also teaches a wireless video system (Figure 1 of Hylton et al.) wherein the wireless video display module (Unit 100 in conjunction with Unit 103 in Figure 1) further comprises a decryption function (Unit 207 in Figure 5, column 19, lines 13-16).

### Response to Arguments

4. Applicant's arguments with respect to claims 1-15 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments filed October 18, 2006 have been fully considered but they are not persuasive.

Applicant argues with respects to claims 5, 14, and 16-29 that Hylton teaches away from the use of narrow bandwidth wireless video link. However, Hylton does not teach away from the use of narrow bandwidth wireless video link. Hylton states that the system uses spread spectrum techniques to transmit data through the RF spectrum.

IEEE 802.11(b) is a wireless RF transmission system that utilizes the spread spectrum technique. Since applicant discloses that IEEE 802.11(b) is a form of narrow bandwidth wireless link (See Applicant's specification page 5 lines 13-15), Hylton in view of Atkinson therefore meets the limitation of narrow bandwidth wireless video link.

Applicant further argues that Atkinson does not disclose the use of IEEE 802.11(b) to transmit video information. However, Atkinson does use the IEEE

Application/Control Number: 09/928,056 Page 16

Art Unit: 2623

802.11(b) to transmit programming media elements, wherein the programming media elements are video programs (See paragraphs 0014 and 0042).

Applicant is reminded that although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

### Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph G. Ustaris whose telephone number is 571-272-7383. The examiner can normally be reached on M-F 7:30-5PM; Alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher S. Kelley can be reached on 571-272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 09/928,056 Page 17

Art Unit: 2623

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JGU

December 7, 2006

CHRIS KELLEY SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2600